

Table A-1. Continued.

Longitude°W	Latitude°N	Date	Time ADST	Flight	Attribute	Species	Bulls	Cows	Calves	Unclass	Total	Behavior	Habitat	Direction
146.476222	69.967850	25-Jun-99	13:24:50	3	30	ca	0	10	4	5	19	feed	Ve	
146.451905	69.952110	25-Jun-99	13:25:23	3	31	ca	0	0	0	2	2	run	Va	E
146.472044	69.947450	25-Jun-99	13:25:33	3	32	ca	0	2	2	0	4	move	Va	E
146.486581	69.963300	25-Jun-99	13:29:53	3	33	ca	0	0	0	11	11			
146.485841	69.972620	25-Jun-99	13:30:13	3	34	ca	0	0	0	4	4			
146.490998	70.020520	25-Jun-99	13:31:58	3	35	ca	0	2	1	0	3	rest	Va	
146.553877	70.146890	25-Jun-99	13:40:20	3	36	ca	0	3	2	0	5	feed	Va	
146.558522	69.986860	25-Jun-99	13:45:56	3	37	ca	0	30	20	3	53	feed	Va	
146.536025	69.972960	25-Jun-99	13:46:27	3	38	ca	0	70	40	20	130	feed	Ve	
146.570888	69.946020	25-Jun-99	13:50:59	3	39	ca	0	0	0	1	1	rest		
146.590050	69.975900	25-Jun-99	13:52:04	3	40	ca	1	0	0	2	3	feed	Vb	
146.589390	70.005170	25-Jun-99	13:53:07	3	41	ca	0	1	1	2	4	feed	Ve	
146.577285	70.020980	25-Jun-99	13:53:41	3	42	ca	0	50	20	0	70	feed	Ve	
146.577185	70.036270	25-Jun-99	13:54:14	3	43	ca	0	15	10	0	25	feed	Va	
146.580264	70.166030	25-Jun-99	13:58:59	3	44	ca	0	7	4	0	11	stand	Va	
146.621744	70.172990	25-Jun-99	14:00:29	3	45	ca	0	3	2	0	5	feed	Va	
146.621234	70.167950	25-Jun-99	14:00:39	3	46	ca	0	5	4	0	9	feed	Va	
146.630470	70.158830	25-Jun-99	14:00:59	3	47	ca	0	1	1	0	2	rest	Va	
146.607511	70.018620	25-Jun-99	14:05:51	3	48	ca	0	0	0	1	1	feed	Vc	
146.653161	69.949210	25-Jun-99	14:12:07	3	49	ca	0	0	0	2	2			
146.654441	69.958060	25-Jun-99	14:12:26	3	50	ca	0	0	0	1	1			
146.682314	70.016720	25-Jun-99	14:14:33	3	51	ca	0	6	4	1	11	feed	Vc	
146.650251	70.066660	25-Jun-99	14:16:23	3	52	ca	0	0	0	45	45			
146.680452	70.076520	25-Jun-99	14:16:45	3	53	ca	0	35	20	0	55	feed	Ve	
146.690979	70.140510	25-Jun-99	14:19:05	3	54	ca	0	3	1	1	5	feed	Va	
146.704344	70.121050	25-Jun-99	14:23:02	3	55	ca	0	2	2	0	4	feed	Vc	
146.699557	70.108010	25-Jun-99	14:23:29	3	56	ca	0	10	8	0	18	feed	Va	
146.728681	70.095200	25-Jun-99	14:23:55	3	57	ca	0	15	8	15	38	feed	Va	
146.698908	69.980620	25-Jun-99	14:27:50	3	58	ca	0	0	0	1	1	feed	Vc	
146.763985	70.127420	25-Jun-99	14:39:10	3	59	ca	0	2	1	0	3	walk	Va	
146.768164	70.147700	25-Jun-99	14:39:54	3	60	ca	0	4	3	1	8	feed	Va	

Table A-1. Continued.

Longitude°W	Latitude°N	Date	Time ADST	Flight	Attribute	Species	Bulls	Cows	Calves	Unclass	Total	Behavior	Habitat	Direction
146.809302	70.172890	25-Jun-99	14:42:02	3	61	ca	0	11	4	0	15	feed	Va	
146.818028	70.028940	25-Jun-99	14:46:57	3	62	ca	0	0	0	1	1			
146.823538	70.037780	25-Jun-99	14:56:47	3	63	ca	0	9	5	0	14	move	Vc	N
146.836672	70.104200	25-Jun-99	14:59:16	3	64	ca	0	1	0	0	1	feed	Ve	
146.848525	70.150640	25-Jun-99	15:01:00	3	65	ca	0	3	1	0	4	feed	Va	
146.825378	70.171670	25-Jun-99	15:01:46	3	67	ca	0	6	0	0	6			
146.895642	70.117620	25-Jun-99	15:29:19	3	0	ca	0	27	15	0	42	feed	Va	
146.899661	69.935740	25-Jun-99	15:38:15	3	1	ca	0	0	0	1	1			
146.934804	70.047990	25-Jun-99	15:42:25	3	2	ca	0	17	8	0	25	run	Vc	N
146.907337	70.083020	25-Jun-99	15:43:42	3	3	ca	0	45	15	0	60	feed	Vc	
146.937481	70.092980	25-Jun-99	15:44:04	3	4	ca	0	0	0	1	1	feed	Va	
146.911575	70.122010	25-Jun-99	15:45:07	3	5	ca	0	4	3	0	7			
146.907538	70.127600	25-Jun-99	15:45:19	3	6	ca	0	12	7	0	19	feed	Va	
146.983619	70.125760	25-Jun-99	15:48:16	3	7	ca	0	25	10	0	35	rest	Vb	
146.980192	70.111350	25-Jun-99	15:48:46	3	8	ca	0	0	0	13	13	feed	Vc	
146.978152	70.100990	25-Jun-99	15:49:07	3	9	ca	0	30	15	0	45	feed	Vc	
146.955425	70.055470	25-Jun-99	15:50:40	3	10	ca	0	1	0	0	1	feed	Vc	
146.063148	70.106500	29-Jun-99	11:16:36	4	1	ca	0	12	6	0	18			
146.064017	70.116420	29-Jun-99	11:16:59	4	2	ca	0	2	1	0	3			
146.113232	70.135050	29-Jun-99	11:19:26	4	3	ca	0	1	0	0	1			
146.111235	70.112510	29-Jun-99	11:20:13	4	4	ca	0	9	4	0	13			
146.140109	70.096650	29-Jun-99	11:20:46	4	5	ca	4	5	3	0	12			
146.122927	70.071310	29-Jun-99	11:21:37	4	6	ca	0	20	15	0	35			
146.162040	70.042780	29-Jun-99	11:23:32	4	7	ca	0	12	4	0	16			
146.154762	70.049110	29-Jun-99	11:23:47	4	8	ca	0	2	0	0	2			
146.143270	70.068830	29-Jun-99	11:24:32	4	9	ca	0	0	0	7	7			
146.177232	70.095940	29-Jun-99	11:25:34	4	10	ca	0	17	10	0	27			
146.143061	70.102040	29-Jun-99	11:25:47	4	11	ca	0	15	4	0	19			
146.188618	70.018620	29-Jun-99	11:33:59	4	12	ca	0	0	0	2	2		Vc	
146.208785	70.012610	29-Jun-99	11:34:12	4	13	ca	0	0	0	9	9			
146.231030	70.012660	29-Jun-99	11:35:07	4	14	ca	0	3	2	0	5			

Table A-1. Continued.

Longitude°W	Latitude°N	Date	Time ADST	Flight	Attribute	Species	Bulls	Cows	Calves	Unclass	Total	Behavior	Habitat	Direction
146.264772	70.036390	29-Jun-99	11:36:01	4	15	ca	0	25	7	2	34			
146.257415	70.090300	29-Jun-99	11:38:03	4	16	ca	0	7	1	0	8			
146.245432	70.151420	29-Jun-99	11:40:21	4	17	ca	0	2	0	0	2			
146.278947	70.099640	29-Jun-99	11:44:31	4	18	ca	0	4	2	0	6			
146.306484	70.053140	29-Jun-99	11:46:06	4	19	ca	0	8	6	0	14			
146.304285	70.048290	29-Jun-99	11:46:16	4	20	ca	0	1	1	0	2			
146.274388	69.975860	29-Jun-99	11:48:46	4	21	ca	0	55	12	10	77			
146.302334	69.956570	29-Jun-99	11:49:26	4	22	ca	0	35	20	0	55			
146.345394	70.025630	29-Jun-99	11:53:31	4	23	ca	1	1	0	0	2			
146.334530	70.030430	29-Jun-99	11:53:42	4	24	ca	0	11	1	0	12			
146.350681	70.036500	29-Jun-99	11:53:56	4	25	ca	0	25	10	5	40			
146.333808	70.077350	29-Jun-99	11:55:29	4	26	ca	0	1	1	0	2			
146.310851	70.110420	29-Jun-99	11:56:45	4	27	ca	0	3	0	0	3			
146.388134	70.132660	29-Jun-99	12:01:37	4	28	ca	0	3	1	0	4			
146.364487	70.083500	29-Jun-99	12:03:17	4	29	ca	0	5	2	0	7			
146.381817	69.974440	29-Jun-99	12:06:58	4	30	ca	0	1	0	0	1			
146.428842	70.041560	29-Jun-99	12:15:18	4	31	ca	0	50	25	0	75			
146.407835	70.054620	29-Jun-99	12:15:47	4	32	ca	0	30	15	10	55			
146.399230	70.083610	29-Jun-99	12:16:53	4	33	ca	0	6	2	0	8			
146.410134	70.087980	29-Jun-99	12:17:03	4	34	ca	0	15	7	3	25			
146.436469	70.094970	29-Jun-99	12:17:19	4	35	ca	0	1	1	0	2			
146.401758	70.134230	29-Jun-99	12:18:49	4	36	ca	0	3	2	0	5			
146.474861	70.158830	29-Jun-99	12:22:27	4	37	ca	0	20	15	10	45			
146.441680	70.098150	29-Jun-99	12:24:31	4	38	ca	0	12	4	10	26			
146.462040	70.082050	29-Jun-99	12:25:03	4	39	ca	0	1	0	0	1			
146.449897	70.074530	29-Jun-99	12:25:18	4	40	ca	0	1	0	0	1			
146.442131	70.042190	29-Jun-99	12:26:24	4	41	ca	0	0	0	35	35			
146.483890	70.047350	29-Jun-99	12:37:07	4	42	ca	0	20	10	0	30			
146.525828	70.080410	29-Jun-99	12:38:21	4	43	ca	0	1	1	0	2			
146.520712	70.100780	29-Jun-99	12:39:07	4	44	ca	0	11	6	0	17			
146.493027	70.166680	29-Jun-99	12:41:37	4	45	ca	0	2	0	0	2			

Table A-1. Continued.

Longitude°W	Latitude°N	Date	Time ADST	Flight	Attribute	Species	Bulls	Cows	Calves	Unclass	Total	Behavior	Habitat	Direction
146.541702	70.133590	29-Jun-99	12:44:57	4	46	ca	0	5	5	0	10			
146.566089	70.059410	29-Jun-99	12:47:26	4	47	ca	0	0	0	1	1			
146.570130	70.020920	29-Jun-99	12:57:45	4	48	ca	0	2	0	0	2			
146.570810	70.024910	29-Jun-99	12:57:54	4	49	ca	0	1	0	1	2			
146.567420	70.062700	29-Jun-99	12:59:20	4	50	ca	0	0	0	3	3			
146.604631	70.077310	29-Jun-99	12:59:52	4	51	ca	0	4	2	0	6			
146.608768	70.095100	29-Jun-99	13:00:34	4	52	ca	0	0	0	1	1			
146.608008	70.119910	29-Jun-99	13:01:31	4	53	ca	0	0	0	5	5			
146.574427	70.132250	29-Jun-99	13:01:59	4	55	ca	0	6	3	20	29			
146.583271	70.150070	29-Jun-99	13:02:41	4	56	ca	0	8	5	0	13			
146.570191	70.174990	29-Jun-99	13:03:38	4	57	ca	0	0	0	1	1			
146.622735	70.163930	29-Jun-99	13:05:15	4	58	ca	0	16	4	0	20			
146.639394	70.150820	29-Jun-99	13:05:42	4	59	ca	0	0	0	1	1			
146.612477	70.138550	29-Jun-99	13:06:07	4	60	ca	0	20	14	10	44			
146.620017	70.110540	29-Jun-99	13:07:04	4	61	ca	0	14	6	5	25			
146.613368	70.077640	29-Jun-99	13:08:10	4	62	ca	0	15	4	0	19			
146.629450	70.063530	29-Jun-99	13:08:38	4	63	ca	0	7	4	2	13			
146.631908	69.980730	29-Jun-99	13:11:23	4	64	ca	0	1	0	0	1			
146.652210	69.910590	29-Jun-99	13:14:39	4	65	ca	0	0	0	2	2			
146.650641	69.996300	29-Jun-99	13:17:56	4	66	ca	0	0	0	1	1			
146.681462	70.045470	29-Jun-99	13:19:49	4	67	ca	0	54	30	10	94			
146.690659	70.065380	29-Jun-99	13:20:35	4	68	ca	0	5	2	0	7			
146.678037	70.074110	29-Jun-99	13:20:55	4	69	ca	0	1	1	0	2			
146.687891	70.083290	29-Jun-99	13:21:16	4	70	ca	0	2	1	0	3			
146.684971	70.093000	29-Jun-99	13:21:39	4	71	ca	0	20	10	15	45			
146.666641	70.093000	29-Jun-99	13:21:39	4	72	ca	0	3	1	0	4			
146.696808	70.148290	29-Jun-99	13:26:29	4	73	ca	0	7	3	0	10			
146.730619	70.140770	29-Jun-99	13:26:44	4	74	ca	0	0	0	5	5			
146.735308	70.128800	29-Jun-99	13:27:08	4	75	ca	0	0	0	25	25			
146.736008	70.121790	29-Jun-99	13:27:21	4	76	ca	0	0	0	30	30			
146.698668	70.114760	29-Jun-99	13:27:35	4	77	ca	0	1	1	0	2			

Table A-1. Continued.

Longitude°W	Latitude°N	Date	Time ADST	Flight	Attribute	Species	Bulls	Cows	Calves	Unclass	Total	Behavior	Habitat	Direction
146.700355	70.106780	29-Jun-99	13:27:52	4	78	ca	0	20	21	0	41			
146.726559	70.094030	29-Jun-99	13:28:18	4	79	ca	0	2	0	0	2			
146.727251	70.087830	29-Jun-99	13:28:30	4	80	ca	0	30	15	20	65			
146.727574	70.063270	29-Jun-99	13:29:19	4	81	ca	0	3	2	7	12			
146.729211	70.053520	29-Jun-99	13:29:39	4	82	ca	0	5	0	0	5			
146.742727	70.045340	29-Jun-99	13:40:37	4	83	ca	0	2	0	0	2			
146.747055	70.052890	29-Jun-99	13:40:54	4	84	ca	0	65	25	20	110			
146.770002	70.081920	29-Jun-99	13:42:00	4	85	ca	0	0	0	1	1			
146.741578	70.091950	29-Jun-99	13:42:23	4	86	ca	0	15	5	7	27			
146.748654	70.115030	29-Jun-99	13:43:17	4	87	ca	0	9	6	0	15			
146.766414	70.121030	29-Jun-99	13:43:31	4	88	ca	0	7	4	0	11			
146.738290	70.129670	29-Jun-99	13:43:51	4	89	ca	0	75	50	40	165			
146.754242	70.139250	29-Jun-99	13:44:12	4	90	ca	0	15	8	0	23			
146.769505	70.155080	29-Jun-99	13:44:49	4	91	ca	0	4	2	0	6			
146.747537	70.160610	29-Jun-99	13:45:02	4	92	ca	0	23	11	6	40			
146.804525	70.140020	29-Jun-99	13:47:44	4	94	ca	0	1	0	0	1			
146.775251	70.130170	29-Jun-99	13:48:03	4	95	ca	0	0	0	25	25			
146.783517	70.119300	29-Jun-99	13:48:25	4	96	ca	0	4	1	0	5			
146.786465	70.110880	29-Jun-99	13:48:41	4	97	ca	0	20	10	0	30			
146.792742	70.064660	29-Jun-99	13:50:13	4	98	ca	0	1	1	0	2			
146.785707	70.053960	29-Jun-99	13:50:34	4	99	ca	0	35	20	10	65			
146.788122	70.015090	29-Jun-99	13:51:51	4	100	ca	0	1	0	0	1			
146.785617	69.978650	29-Jun-99	13:53:04	4	101	ca	0	2	2	0	4			
146.822590	70.102760	29-Jun-99	14:03:33	4	103	ca	0	0	0	1	1			
146.844907	70.122520	29-Jun-99	14:04:19	4	104	ca	0	3	2	0	5			
146.831974	70.126790	29-Jun-99	14:04:30	4	105	ca	0	7	5	0	12			
146.825028	70.133090	29-Jun-99	14:04:44	4	106	ca	0	5	3	0	8			
146.826428	70.150670	29-Jun-99	14:05:26	4	107	ca	0	2	2	0	4			
146.818991	70.167390	29-Jun-99	14:06:06	4	108	ca	0	0	0	3	3			
146.828375	70.174070	29-Jun-99	14:06:22	4	109	ca	0	1	0	0	1			
146.869028	70.148650	29-Jun-99	14:08:22	4	110	ca	0	28	5	0	33			

Table A-1. Continued.

Longitude°W	Latitude°N	Date	Time ADST	Flight	Attribute	Species	Bulls	Cows	Calves	Unclass	Total	Behavior	Habitat	Direction
146.889315	70.135870	29-Jun-99	14:08:48	4	111	ca	0	4	0	0	4			
146.893502	70.131690	29-Jun-99	14:08:56	4	112	ca	0	15	15	0	30			
146.866898	70.112640	29-Jun-99	14:09:34	4	113	ca	0	26	7	10	43			
146.892842	70.098990	29-Jun-99	14:10:01	4	114	ca	0	15	7	5	27			
146.868987	70.061860	29-Jun-99	14:11:14	4	115	ca	2	70	30	20	122			
146.906978	70.099230	29-Jun-99	14:24:31	4	116	ca	0	70	30	5	105			
146.927887	70.127590	29-Jun-99	14:25:37	4	117	ca	0	5	3	0	8			
146.945288	70.136370	29-Jun-99	14:25:58	4	118	ca	0	0	0	1	1			
146.910068	70.141020	29-Jun-99	14:26:09	4	119	ca	0	40	5	0	45			
146.916845	70.151260	29-Jun-99	14:26:33	4	120	ca	0	2	0	0	2			
146.972607	70.144680	29-Jun-99	14:28:06	4	121	ca	0	15	10	0	25			
146.953757	70.120700	29-Jun-99	14:28:52	4	122	ca	0	120	35	25	180			
146.954594	70.104110	29-Jun-99	14:29:26	4	123	ca	0	7	4	0	11			
146.942701	70.097380	29-Jun-99	14:29:39	4	124	ca	0	0	0	5	5			
146.976784	70.090480	29-Jun-99	14:29:52	4	125	ca	0	1	1	0	2			
146.980899	70.045240	29-Jun-99	14:31:23	4	126	ca	0	1	0	0	1			
146.956605	69.948430	29-Jun-99	14:34:35	4	127	ca	2	0	0	0	2			
146.094241	70.132080	15-Jul-99	10:07:39	6	1	ca	0	2	2	0	4	feed	Va	
146.136702	70.031910	15-Jul-99	10:14:38	6	2	ca	1	0	0	0	1	rest	Xa	
146.238037	70.059060	15-Jul-99	10:34:44	6	3	ca	10	60	25	20	115	feed	Vb	
146.386014	70.124730	15-Jul-99	11:04:12	6	4	ca	0	1	0	0	1	rest	Va	
146.471614	70.110890	15-Jul-99	11:31:38	6	5	ca	10	30	7	0	47	feed	IIIId	
146.475442	70.082740	15-Jul-99	11:32:53	6	6	ca	2	0	0	0	2	feed	IIIId	
146.477931	70.067190	15-Jul-99	11:33:34	6	7	ca	20	50	5	20	95	feed	IIIId	
146.524488	70.110910	15-Jul-99	11:52:31	6	8	ca	0	2	0	0	2	feed	Va	
146.587320	70.139180	15-Jul-99	12:19:33	6	9	ca	1	0	0	0	1	feed	Vb	
146.606681	70.082470	15-Jul-99	12:26:48	6	10	ca	0	1	0	0	1	feed	Ve	
146.684439	70.074191	15-Jul-99	12:42:01	6	11	ca	225	450	150	150	975	move	Va	ENE
146.732169	70.055820	15-Jul-99	12:55:35	6	12	ca	1	0	0	0	1	move	Va	NE
146.733209	70.039290	15-Jul-99	12:56:20	6	13	ca	1	0	0	0	1	move	Ve	W
146.692731	69.924270	15-Jul-99	13:01:28	6	14	ca	0	1	0	3	4	rest	Ve	

Table A-1. Continued.

Longitude°W	Latitude°N	Date	Time ADST	Flight	Attribute	Species	Bulls	Cows	Calves	Unclass	Total	Behavior	Habitat	Direction
146.732077	70.062720	15-Jul-99	13:09:35	6	15	ca	125	350	100	100	675	feed	Va	
146.759248	70.150520	15-Jul-99	13:13:12	6	16	ca	12	50	4	5	71	move	Vc	NE
146.824218	70.137940	15-Jul-99	15:31:15	6	0	ca	1	0	0	0	1	move	Va	N
146.860351	70.067410	15-Jul-99	15:38:33	6	1	ca	0	0	0	1	1	walk	Va	NE
146.859051	69.989220	15-Jul-99	15:41:58	6	3	ca	0	0	0	1	1	feed	Va	NE
146.942491	70.068390	15-Jul-99	15:53:06	6	5	ca	0	0	0	1	1	run	Va	N
146.309282	70.067040	18-Jul-99	18:35:38	7	1	ca	1	0	0	0	1	feed	Va	
146.396751	70.141470	18-Jul-99	18:47:40	7	2	ca	0	1	1	0	2	feed	Iva	
146.583132	70.037650	18-Jul-99	19:24:47	7	3	ca	0	1	0	0	1	stand	IIIe	
146.622407	70.031190	18-Jul-99	19:36:37	7	4	ca	1	0	0	0	1	rest	Va	
146.616401	70.008200	18-Jul-99	19:37:26	7	5	ca	0	1	0	0	1	feed	Va	
146.742548	70.017500	18-Jul-99	19:54:14	7	6	ca	0	0	0	5	5	feed	Va	
146.862678	70.090090	18-Jul-99	20:12:20	7	8	ca	0	0	0	1	1		Ve	
146.882238	70.025630	18-Jul-99	20:21:40	7	9	ca	0	1	0	0	1	feed	Va	
146.397931	70.136100	28-Jul-99	17:26:41	8	1	ca	0	0	0	2	2	Rest	Xe	
146.591497	70.078820	28-Jul-99	18:04:19	8	2	ca	0	0	0	1	1	Rest	Va	
146.568680	70.088050	28-Jul-99	18:04:39	8	3	ca	0	0	0	1	1	Feed	Va	
146.655748	70.053120	28-Jul-99	18:17:35	8	4	ca	0	0	0	1	1	Feed	Va	
146.761377	70.013070	28-Jul-99	18:29:59	8	5	ca	0	20	12	5	37	Walk	IIIe	

Table A-2. Muskoxen (mx) and grizzly bear (bb) sightings in the Bullen Point to Staines River study area, Alaska, summer 1999. Coordinates are longitude, latitude, and datum is WGS 1984. Time is Alaska Daylight Savings Time. See Table 6 for habitat code definitions.

Longitude °W	Latitude °N	Date	Time	Flight	Attribute	Species	Bulls	Cows	Calves	Unclass	Total	Behavior	Habitat	Direction
146.253528	70.139070	4-Jun-99	11:18:55	0	1	mx	0	1	1	0	2	feed	Xa	
146.828515	70.032300	9-Jul-99	13:36:22	5	1	mx	0	0	0	8	8	rest	Vc	
146.974525	69.944310	9-Jul-99	14:08:15	5	2	bb	0	0	0	1	1	feed	Vc	
146.858781	70.036610	15-Jul-99	15:39:54	6	2	mx	0	0	0	8	8	run	Vb	East
146.868955	69.907010	15-Jul-99	15:45:32	6	4	bb	0	0	0	1	1	rest	Vc	
146.786085	70.014080	18-Jul-99	20:07:22	7	7	mx	0	0	0	7	7	feed		
146.907698	70.084130	28-Jul-99	19:01:03	8	6	mx	0	1	1	7	9			

Table A-3. Opportunistic caribou (ca) sightings outside the Bullen Point to Staines River study area, Alaska, summer 1999. Coordinates are longitude, latitude, and datum is WGS 1984. Time is Alaska Daylight Savings Time. See Table 6 for habitat code definitions.

Longitude °W	Latitude °N	Date	Time	Flight	Attribute	Species	Bulls	Cows	Calves	Unclass	Total	Behavior	Habitat	Direction
146.574010	69.898390	14-Jun-99	13:37:03	1	62	ca	0	4	0	0	4			
146.635688	69.904180	14-Jun-99	13:59:57	1	86	ca	0	2	2	0	4			
146.739100	69.900850	14-Jun-99	14:22:37	1	95	ca	0	11	0	0	11			
146.733800	69.900160	14-Jun-99	14:25:03	1	26	ca	0	1	0	0	1			
146.746114	69.909010	14-Jun-99	14:25:33	1	27	ca	0	7	3	0	10			
146.340854	69.953200	25-Jun-99	12:45:44	3	9	ca	0	50	27	0	77	Stand	Xa	

Table A-4. Observed and expected number of caribou groups by habitat type based on systematic strip-transect aerial survey locations in the Bullen Point to Staines River study area from 1993 to 1999, and land cover mapping for the Point Thomson Unit Area (Noel and Funk 1999).

Land Cover Class	Land Area (acres)	Proportion of Total Area	Number of Caribou Groups ¹	Expected Number of Caribou	Proportion Observed in Each Interval	Confidence Interval on Proportion of Occurrence (90% Confidence Coefficient)		Comparison of Proportion of Total Area with Confidence Interval
						Lower	Upper	
Ia	14518.8	0.466	16	34	0.222	0.092	0.353	<Expected
IIb	174.8	0.006	1	0	0.014	-0.023	0.051	Within
IIc	163.1	0.005	1	0	0.014	-0.023	0.051	Within
IIIa	980.4	0.031	4	2	0.056	-0.016	0.127	Within
IIIc	173.5	0.006	1	0	0.014	-0.023	0.051	Within
IIId	5610.1	0.180	14	13	0.194	0.070	0.319	Within
IVa	3366.2	0.108	7	8	0.097	0.004	0.190	Within
Va	3773.5	0.121	16	9	0.222	0.092	0.353	Within
Vc	639.0	0.020	2	1	0.028	-0.024	0.079	Within
Ve	1190.9	0.038	5	3	0.069	-0.010	0.149	Within
Xa	163.3	0.005	2	0	0.028	-0.024	0.079	Within
Xe	66.6	0.002	1	0	0.014	-0.023	0.051	Within
XIa	351.1	0.011	2	1	0.028	-0.024	0.079	Within
Study Area Total	31171.3	1.000	72	72	1.000			

¹ χ^2 for observed versus expected number of caribou per interval ($\chi^2 = 34.96$, $df = 12$, $P = 0.00048$).

APPENDIX B.

MOSQUITO AND OESTRID ACTIVITY INDICES

Appendix B. Mosquito and Oestrid Activity Indices.

Mosquito Activity Index (Russell 1993)

IF temperature >18°C THEN $TI_m = 1$
IF temperature <6°C THEN $TI_m = 0$
 $TI_m = 1 - ((18 - \text{temperature}) / 13)$
IF wind >6 mps then $WI_m = 0$
 $WI_m = (6 - \text{wind}) / 6$
 $I_m = TI_m \times WI_m$

where:

TI_m = Temperature Index for Mosquitoes
 WI_m = Wind Index for Mosquitoes
 I_m = Mosquito Activity Index

These parameters were translated into IF statements for TI_m and WI_m with inputs as follows:

T_h = Temperature in °C recorded hourly at Deadhorse Weather Station
 V_h = Wind velocity in mps recorded hourly at Deadhorse Weather Station

Syntax is IF (logical test, value if true, value if false)

$TI_m = \text{IF}(T_h < 6, 0, \text{IF}(T_h > 18, 1, (1 - ((18 - T_h) / 13))))$
 $WI_m = \text{IF}(V_h > 6, 0, ((6 - V_h) / 6))$
then $I_m = TI_m \times WI_m$

Oestrid Activity Index (Mörschel 1999)

Predicts presence/absence of oestrid flies with 83% reliability

$$y = \frac{e^{(-2.9646 + 0.166 \times \text{Temp} - 0.1951 \times \text{Wind})}}{1 + e^{(-2.9646 + 0.166 \times \text{Temp} - 0.1951 \times \text{Wind})}}$$

where:

y = estimated probability of oestrid fly presence (between 0 and 1)
Temp = Temperature in °C recorded hourly at Deadhorse Weather Station
Wind = Wind speed in mps recorded hourly at Deadhorse Weather Station

Oestrid flies were considered present when y was ≥ 0.4

Table B-1. Daily average temperature and wind velocity recorded at the Deadhorse Weather Station (ASCC 1999), with tabulations of hourly mosquito (Russel et al. 1993) and oestrid activity indices (Mörschel 1999).

Date	Mean Temperature		Mean Wind Speed (mps)		Mosquito Index			Oestrid Index	
	°C	<i>n</i>		<i>n</i>	Number of	Number of	Mosq. No.	Number of	Number of
					Records	Records		Records	Records
					<0.5	≥0.5		<0.4	≥0.4
1-May-99	-7.56	27	4.05	34	27	0	N/A	27	0
2-May-99	-8.75	12	9.12	12	12	0	N/A	12	0
3-May-99	-12.69	26	9.88	26	26	0	N/A	26	0
4-May-99	-14.29	24	7.88	24	24	0	N/A	24	0
5-May-99	-10.73	30	4.83	32	30	0	N/A	30	0
6-May-99	-9.13	30	2.86	32	30	0	N/A	30	0
7-May-99	-7.75	28	3.60	28	28	0	N/A	28	0
8-May-99	-6.14	29	3.30	31	29	0	N/A	29	0
9-May-99	-5.56	25	3.15	30	25	0	N/A	25	0
10-May-99	-5.91	35	8.03	37	35	0	N/A	35	0
11-May-99	-2.48	27	7.75	27	27	0	N/A	27	0
12-May-99	-2.07	29	9.98	29	29	0	N/A	29	0
13-May-99	-2.93	29	4.71	29	29	0	N/A	29	0
14-May-99	-0.81	21	3.66	23	21	0	N/A	21	0
15-May-99	-1.04	24	3.24	24	24	0	N/A	24	0
16-May-99	-2.04	24	3.81	24	24	0	N/A	24	0
17-May-99	-7.00	27	5.65	29	27	0	N/A	27	0
18-May-99	-7.73	26	9.23	26	26	0	N/A	26	0
19-May-99	-6.42	26	10.81	26	26	0	N/A	26	0
20-May-99	-5.74	27	9.52	27	27	0	N/A	27	0
21-May-99	-5.52	25	6.70	25	25	0	N/A	25	0
22-May-99	-4.23	21	4.13	26	20	0	N/A	20	0
23-May-99	-4.12	25	2.61	29	25	0	N/A	25	0
24-May-99	-3.52	27	8.57	27	27	0	N/A	27	0
25-May-99	-4.36	25	9.52	25	25	0	N/A	25	0
26-May-99	-4.23	26	11.01	26	26	0	N/A	26	0
27-May-99	-2.00	29	7.67	29	29	0	N/A	29	0
28-May-99	-0.36	25	3.56	29	25	0	N/A	25	0
29-May-99	-1.34	29	5.11	30	29	0	N/A	29	0
30-May-99	-2.08	24	7.73	24	24	0	N/A	24	0
31-May-99	-0.61	31	2.77	34	31	0	N/A	31	0

Table B-1. Continued.

Date	Mean Temperature (°C)	<i>n</i>	Mean Wind Speed (mps)	<i>N</i>	Mosquito Index			Oestrid Index	
					Number of Records	Number of Records	Mosq. No.	Number of Records	Number of Records
					<0.5	≥0.5		<0.5	≥0.5
1-Jun-99	-0.58	31	7.56	32	31	0	N/A	31	0
2-Jun-99	-0.53	17	6.29	27	17	0	N/A	17	0
3-Jun-99	0.06	33	3.59	34	33	0	N/A	33	0
4-Jun-99	-0.07	29	5.84	29	29	0	N/A	29	0
5-Jun-99	-0.32	28	4.98	28	28	0	N/A	28	0
6-Jun-99	-0.07	27	4.69	29	27	0	N/A	27	0
7-Jun-99	-2.07	30	7.29	30	28	0	N/A	28	0
8-Jun-99	-0.52	25	8.30	25	25	0	N/A	25	0
9-Jun-99	1.63	35	6.83	35	35	0	N/A	35	0
10-Jun-99	1.32	37	7.47	37	37	0	N/A	37	0
11-Jun-99	2.37	41	3.89	41	41	0	N/A	41	0
12-Jun-99	5.84	25	5.39	25	25	0	N/A	25	0
13-Jun-99	7.54	26	4.12	26	26	0	N/A	26	0
14-Jun-99	4.66	29	3.62	29	29	0	N/A	29	0
15-Jun-99	5.04	26	5.05	26	26	0	N/A	26	0
16-Jun-99	4.25	28	10.17	28	28	0	N/A	28	0
17-Jun-99	3.58	36	4.15	36	36	0	N/A	36	0
18-Jun-99	1.82	38	3.91	38	38	0	N/A	38	0
19-Jun-99	2.09	33	3.79	33	33	0	N/A	33	0
20-Jun-99	1.18	34	6.48	34	34	0	N/A	34	0
21-Jun-99	0.47	36	12.67	36	36	0	N/A	36	0
22-Jun-99	2.22	37	8.36	37	37	0	N/A	37	0
23-Jun-99	3.53	32	3.88	32	32	0	N/A	32	0
24-Jun-99	2.00	38	5.42	38	38	0	N/A	38	0
25-Jun-99	5.25	24	5.04	24	24	0	N/A	24	0
26-Jun-99	6.92	24	3.77	24	24	0	N/A	24	0
27-Jun-99	1.14	35	3.83	36	35	0	N/A	35	0
28-Jun-99	3.59	29	3.21	29	29	0	N/A	29	0
29-Jun-99	4.83	24	6.35	24	24	0	0	24	0
30-Jun-99	6.38	24	4.53	24	24	0	0.5	24	0

Table B-1. Continued.

Date	Mean Temperature (°C)	<i>n</i>	Mean Wind Speed (mps)	<i>n</i>	Mosquito Index			Oestrid Index	
					Number of Records <0.5	Number of Records ≥0.5	Mosq. No.	Number of Records <0.4	Number of Records ≥0.4
1-Jul-99	10.79	24	4.31	24	23	1	1.5	24	0
2-Jul-99	15.91	23	3.80	23	20	3	103.3	20	3
3-Jul-99	14.21	24	3.97	24	24	0	38.5	24	0
4-Jul-99	14.63	24	5.234	24	24	0	5.62	24	0
5-Jul-99	15.17	24	4.46	24	23	1	92.9	24	0
6-Jul-99	8.83	42	5.11	42	42	0	40.0	42	0
7-Jul-99	8.30	37	2.40	38	37	0	17.6	37	0
8-Jul-99	9.16	32	2.38	32	32	0	26.9	32	0
9-Jul-99	12.00	26	3.039	26	23	3	83.1	25	1
10-Jul-99	9.20	30	4.29	30	30	0	26.5	30	0
11-Jul-99	6.92	24	3.75	24	24	0	22.1	24	0
12-Jul-99	6.91	23	4.29	24	23	0	20	23	0
13-Jul-99	8.65	23	5.55	23	23	0	8.5	23	0
14-Jul-99	8.63	24	7.21	24	24	0	5	24	0
15-Jul-99	10.21	24	4.76	24	21	3	7.3	24	0
16-Jul-99	10.17	29	3.09	29	28	1	29.5	29	0
17-Jul-99	5.97	36	4.71	36	36	0	3.4	36	0
18-Jul-99	4.26	27	5.70	27	27	0	1.9	27	0
19-Jul-99	3.88	34	3.42	34	34	0	0	34	0
20-Jul-99	2.54	26	8.99	26	26	0	0	26	0
21-Jul-99	1.83	36	6.31	36	36	0	0	36	0
22-Jul-99	2.97	34	5.01	34	34	0	26.3	34	0
23-Jul-99	2.50	34	1.89	34	34	0	2.2	34	0
24-Jul-99	3.0	38	2.94	38	38	0	0	38	0
25-Jul-99	1.52	42	5.85	42	42	0	N/A	42	0
26-Jul-99	1.71	35	8.95	36	35	0	N/A	35	0
27-Jul-99	2.03	36	7.52	36	36	0	N/A	36	0
28-Jul-99	2.03	30	3.04	30	30	0	N/A	30	0
29-Jul-99	2.46	41	6.25	42	41	0	N/A	41	0
30-Jul-99	7.92	24	3.62	24	24	0	N/A	24	0
31-Jul-99	12.00	24	4.63	24	15	0	N/A	15	0

Table B-1. Continued.

Date	Mean Temperature (°C)	<i>n</i>	Mean Wind Speed (mps)	<i>N</i>	Mosquito Index			Oestrid Index	
					Number of Records	Number of Records	Mosq. No.	Number of Records	Number of Records
					<0.5	≥0.5		<0.4	≥0.4
1-Aug-99	12.86	21	4.01	21	19	2	N/A	21	0
2-Aug-99	11.00	21	3.45	21	21	0	N/A	21	0
3-Aug-99	7.63	32	8.05	32	32	0	N/A	32	0
4-Aug-99	9.97	29	5.76	29	29	0	N/A	29	0
5-Aug-99	17.42	24	4.07	24	20	4	N/A	14	10
6-Aug-99	15.73	30	3.07	32	28	2	N/A	20	10
7-Aug-99	9.52	27	5.79	27	27	0	N/A	27	0
8-Aug-99	7.10	41	5.30	41	41	0	N/A	41	0
9-Aug-99	9.72	43	1.91	45	43	0	N/A	43	0
10-Aug-99	7.22	37	3.26	39	37	0	N/A	37	0
11-Aug-99	12.63	24	3.02	24	18	6	N/A	22	2
12-Aug-99	7.24	34	4.04	43	34	0	N/A	34	0
13-Aug-99	7.13	39	2.93	39	39	0	N/A	39	0
14-Aug-99	9.41	29	3.48	30	29	0	N/A	29	0
15-Aug-99	7.18	39	2.00	39	39	0	N/A	39	0
16-Aug-99	10.38	26	3.06	26	26	0	N/A	26	0
17-Aug-99	10.98	40	6.72	41	40	0	N/A	40	0
18-Aug-99	5.11	57	3.00	57	57	0	N/A	57	0
19-Aug-99	3.32	34	11.91	34	34	0	N/A	34	0
20-Aug-99	4.10	29	10.85	29	29	0	N/A	29	0
21-Aug-99	3.18	39	8.84	44	39	0	N/A	39	0
22-Aug-99	3.07	46	3.50	54	46	0	N/A	46	0
23-Aug-99	3.02	44	9.74	44	44	0	N/A	44	0
24-Aug-99	2.83	36	9.52	36	36	0	N/A	36	0
25-Aug-99	2.55	31	4.59	31	31	0	N/A	31	0
26-Aug-99	5.92	24	5.23	24	24	0	N/A	24	0
27-Aug-99	2.34	41	5.58	41	41	0	N/A	41	0
28-Aug-99	-0.19	31	3.73	31	31	0	N/A	31	0
29-Aug-99	0.69	35	8.39	35	35	0	N/A	35	0
30-Aug-99	2.25	40	6.94	40	40	0	N/A	40	0
31-Aug-99	1.16	19	3.22	27	19	0	N/A	19	0